# SECTION 39 STG 2017-2018 OUTSTANDING ISSUE PRIORITIZATION

Updated January 24, 2017

**Desired STG Outcome:** Develop biddable/buildable HMA specifications that are based on good economic/engineering judgment and FHWA guidelines.

Yellow highlights = Latest comments

Green Highlight = Item complete but waiting on action

Blue highlights = Item has been resolved - no action required

Pink highlight = Items being addressed by another STG

Red highlight = Action Required

## 1. Opening Comments & Bin List

- 1. 1. Bin List Proposed Items for Future Discussion
- 1. 2. 06/21/2017 Sacramento
- 1. 3. 07/25/2017 San Diego
- 1. 4. 08/23/2017 Sacramento
- 1. 5. 09/27/2017 San Diego
- 1. 6. 11/02/2017 Sacramento
- 1. 7. 12/13/2017 Sacramento
- 1. 8. 01/24/2018 Sacramento
  - 1. 8. 1. No general comments
- 2. 1 #08: Cure time for plant samples (May be for any sample)
- 3. 2 #91: Payment and Non-Payment Quality Characteristics (CT)
- 3. 1. ISSUE: Identify quality characteristics that should be categorized as payment and non-payment related quality characteristic.
- 3. 2. PROPOSER: CT
- 3. 3. RESOLUTION:
- 3. 4. DATE:
- 3. 5. COMMENTS:
  - 3. 5. 1. 11/16/2016
  - 3. 5. 2. 06/21/2017
  - 3. 5. 3. 07/26/2017
  - 3. 5. 4. 08/23/2017
  - 3. 5. 5. 11/02/2017
  - 3. 5. 6. 12/13/2017.
  - 3. 5. 7. **01/24/2018** 
    - 3. 5. 7. 1. CT: For non-QC/QA projects, CT wants to have a separate pay deduction table for each critical test.
    - 3. 5. 7. 2. IN: This would require an evaluation of the appropriate limits based on the test standard deviation including variability. This was done in the revisions to the binder content specification limits. CT and industry also did this in the development of the

density specification. For density, the limit was reduced from min 92% to min 91% based on the evaluation of standard deviation where only one test is used for acceptance.

- 3. 5. 7. 3. IN: Evaluation needs to occur for asphalt rubber mixes. Standard deviations used for asphalt rubber specification limits are based on conventional mixes.
- 3. 5. 7. 4. IN: Proposal Develop an analysis process. For HMA-A evaluate asphalt content limits. Utilize current test standard deviation for HMA-A. Determine appropriate limits based on different number of samples and different risk levels.
- 3. 5. 7. 5. IN: need to determine "critical" criteria, spec limits, and deduction/incentive based on performance.
- 3. 5. 7. 6. CT: Will discuss the process internally on proceeding with this item in light of discussion.
- 3. 5. 7. 7. CT/IN: ACTION agree that IN will proceed with 3.5.7.4 and present at next meeting.
- 3. 5. 7. 8.

## 4. 3 #58: QA Sampling responsibility and providing split samples from the QA sample

- 4. 1. ISSUE: Caltrans would like language in the spec outlining the responsibility for Quality Acceptance sampling and sample splitting. Specifically the requirements for CT participation in the sampling and splitting process
- 4. 2. PROPOSER: CT
- 4. 3. RESOLUTION:
- 4. 4. DATE:
- 4. 5. Comments:
  - 4. 5. 1. 08/25/2015
  - 4. 5. 2. 10/23/2015
  - 4. 5. 3. 12/02/2015
  - 4. 5. 4. 01/05/2016
  - 4. 5. 5. 03/17/2016
  - 4. 5. 6. 06/21/2017
  - 4. 5. 7. 07/26/2017
  - 4. 5. 8. 08/23/2017
  - 4. 5. 9. 09/27/2017
  - 4. 5. 10. 11/02/2017
  - 4. 5. 11. 12/13/2017
    - 4. 5. 11. 1. CT: Agrees to provide split of QA sample to Contractor (in conjunction with resolution of Item 4). KF will confirm at next meeting.
  - 4. 5. 12. 01/24/2018
    - 4. 5. 12. 1. CT: CONFIRMED Allow split of Engineer's acceptance sample (in conjunction with Item #4)
    - 4. 5. 12. 2. CT/IN: If requested, the Engineer will provide a split of the Engineer's acceptance sample.
    - 4. 5. 12. 3. CT: ACTION Submit for inclusion in next RSS.

### 5. 4 #40: Required QC Staff on a Caltrans Project

- 5. 1. ISSUE: Contractors want to have some minimums in the spec for how many people must be on the job for QC, to create a level playing field.
- 5. 2. PROPOSER: IN
- 5. 3. RESOLUTION:
- 5. 4. DATE:

#### 5. 5. Comments:

- 5. 5. 1. 02/19/2015 5. 5. 2. 04/09/2015 5. 5. 3. 05/21/2015 5. 5. 4. 06/25/2015 5. 5. 5. 07/22/2015 08/25/2015 5. 5. 6. 5. 5. 7. 10/23/2015 5. 5. 8. 12-02-2015 5. 5. 9. 12/02/2015 5. 5. 10. 01/09/2015 5. 5. 11. 02/23/2016 5. 5. 12. 03/17/2016 5. 5. 13. 09/20/2016 01/11/2017 5. 5. 14. 5. 5. 15. 02/15/2017 5. 5. 16. 06/21/2017 5. 5. 17. 07/26/2017 5. 5. 18. 08/23/2017 09/27/2017 5. 5. 19. 5. 5. 20. 11/02/2017 5. 5. 21. **12/13/2017** 
  - 5. 5. 21. 1. CT: Contractor will provide 3 QC personnel for Method projects and 4 QC personnel for Density projects. 1 of the QC personnel will assist in obtaining samples for the Engineer.
  - 5. 5. 21. 2. CT: KF will confirm and provide official position at next meeting.
- 5. 5. 22. **01/24/2018** 
  - 5. 22. 1. CT: CONFIRMED Contractor will provide 3 QC personnel for Method projects and 4 QC personnel for Density projects. 1 of the QC personnel will assist in obtaining samples for the Engineer.
  - 5. 5. 22. 2. IN: Do we agree that the Contractor will determine the location for these personnel?
  - 5. 5. 22. 3. CT: Minimum personnel required. Minimum 1 at the plant and 1 with the placement location.
  - 5. 22. 4. CT/IN: Contractor will provide, at a minimum, 3 QC personnel for Method projects and 4 QC personnel for Density projects. 1 of the QC personnel will assist in obtaining samples for the Engineer. A minimum of 1 QC person at the plant and 1 QC person with the placement location.
  - 5. 5. 22. 5. CT: Submit for Inclusion in next RSS.
- 6. 5 #94: Moisture Susceptibility treatment should be based on T 283 and AASHTO T 324.
- 7. 6 #84 Max dry strength of 300 psi for lime treated mixes
- 8. **7 #65 Gyratory Compaction temperature**
- 8. 1. ISSUE: CT would like to use a standardize gyratory compaction temperatures
- 8. 2. PROPOSER: CT
- 8. 3. RESOLUTION:
- 8. 4. DATE:
- 8. 5. Comments:

- 8. 5. 1. 09/30/2015 8. 5. 2. 10/23/2015 8. 5. 3. 01/05/2016 8. 5. 4. 01/05/2016 8. 5. 5. 04/12/2016 8. 5. 6. 08/18/2016 8. 5. 7. 08/18/2016
- 8. 5. 8. 12/14/2016
- 0. 5. 0. 12/14/2010
- 8. 5. 9. 07/26/2017
- 8. 5. 10. 09/27/2017
- 8. 5. 11. 11/02/2017
- 8. 5. 12. 12/13/2017
- 8. 5. 13. **01/24/2018** 
  - 8. 5. 13. 1. CT: Based on the binder supplier's information on compaction temperatures, CT proposes the following: PG 64-XX compact at 285F +/-5F, PG 70-XX compact at 295F +/-5F, Modified binders compact per binder supplier recommendation.
  - 8. 5. 13. 2. IN: will discuss with binder suppliers and possibly conduct lab evaluation..

## 9. 8 #71 Industry proposal – Use of ½ inch RHMA-G in 0.20 lifts (Comment from 02-23-2016)

- 9. 1. ISSUE: Use of ½ inch RHMA-G in 0.20 lifts
- 9. 2. PROPOSER: IN
- 9. 3. RESOULTION:
- 9. 4. DATE:
- 9. 5. COMMENTS:
  - 9. 5. 1. 02/23/2016
  - 9. 5. 2. 04/12/2016
  - 9. 5. 3. 06/14/2016
  - 9. 5. 4. 09/20/2016
  - 9. 5. 5. 12/14/2016
  - 9. 5. 6. 09/27/2017
  - 9. 5. 7. 12/13/2017
    - 9. 5. 7. 1. IN: provided UCPRC research study on ½" RHMA-G constructed in 0.2' lifts and tested with HVS and various performance testing. Research confirmed acceptable performance of all test sections.
    - 9. 5. 7. 2. CT: will contact UCPRC on research related to ¾" RHMA-G. The performance results can be compared to the ½" RHMA-G performance results.
    - 9. 5. 7. 3. CT: Needs information on whether ½" RHMA-G performs equal to or better than ¾" RHMA-G. D11 concerned with RHMA-G mixes designed with 5% AV.
  - 9. 5. 8. 01/24/2018
    - 9. 5. 8. 1. CT: in order to move forward, need information comparing 3/4" RHMA-G and 1/2" RHMA-G.
    - 9. 5. 8. 2. CT: will contact UCPRC regarding any research on 3/4" RHMA-G. Will consider comparison between available research
    - 9. 5. 8. 3. CT/IN: will propose research to evaluate 3/4" RHMA-G and 1/2" RHMA-G in the field. D11 could provide possible pilot project location (contact Al Ochoa).

# 10. **9 #68 Splitting Lifts, 0.35**'

- 10. 1. ISSUE: Splitting Lifts >0.30'. Should be >/=0.30'?
- 10. 2. PROPOSER: CT

- 10. 3. RESOULTION:
- 10. 4. DATE:
- 10. 5. COMMENTS:

10.	5.	1.	12/02/2015
10.	5.	2.	01/05/2016
10.	5.	3.	04/12/2016
10.	5.	4.	12/14/2016
10.	5.	5.	03/08/2017
10.	5.	6.	04/11/2017
10.	5.	7.	09/27/2017
10.	5.	8.	12/13/2017
10	5	Q	01/24/2018

10. 5. 9. 1. CT: submitted for inclusion in January RSS. Waiting for publishing of RSS.

# 11. 10 #75 Use of CEM 3512 to Determine SGC specimen height

- 11. ISSUE: AASHTO T312 section 8.1.1) is very clear that "If the specimens are to be used for determination of volumetric properties the batch weight will be adjusted to result in a compacted specimen having dimensions of 150 mm in diameter and 115 +/-5 mm in height. This section is for Laboratory Prepared samples. Since there is no such reference in section 8.2 Plant Produced some at Caltrans interpret that the sample weight to be used should come from the CEM 3512 and the height is whatever you get. Clearly this is not the case as the heights of the briquettes will have an impact on the volumetric properties
- 11. 2. PROPOSER: IN
- 11. 3. RESOULTION:
- 11. 4. DATE:
- 11. 5. COMMENTS:
  - 11. 5. 1. 04/12/2016
    11. 5. 2. 06/14/2016
    11. 5. 3. 01/24/2018
    - 11. 5. 3. 1. CT: will not require Contractor to report sample weight on JMF. Since this is reported in the "comments" section, JMF forms do not requiring a change. CT will inform labs (through METS and DMEs) that the Contractor will not need to provide sample weights and the labs need to determine the weights needed to obtain the required specimen height.
- 12. <u>11 #90 Requirement that binder labs for RAP be IA certified for blending charts.</u>
- 12. ISSUE: New specification language as part of RAP CPD requires IA certified binder labs. There are no labs that have this certification. Caltrans has not developed a certification program for binder labs.
- 12. 2. PROPOSER: IN
- 12. 3. RESOULTION:
- 12. 4. DATE:
- 12. 5. COMMENTS:
  - 12.
     5.
     1.
     09/09/2016

     12.
     5.
     2.
     03/08/2017

     12.
     5.
     3.
     04/11/2017

     12.
     5.
     4.
     01/24/2018
    - 12. 5. 4. 1. CT: Will check with CT managers on the status of required certification.
    - 12. 5. 4. 2. IN: Proposal remove the language requiring IA certification for blending charts...
- 13. 12 #20 Revisit RAP Reporting on CEM 3512 (September 25, 2014) FOLLOW UP\*\*\*

- 14. 13 #06 How do we measure temperature in windrows and behind pavers?
- 15. 14 #96 Method specifications need to be revised IN. (Small Group formed 03/08/2017).
- 16. <u>15 #89 Contractor submitting same JMF on multiple projects after 2 failed verification to avoid paying for additional verifications</u>
  - 17. **16 #62 Standardize the way GSE is calculated**
- 18. <u>17 #78 When determining density on multiple lifts is density required on both lifts or can the contractor split the lifts and test each lift separately?</u>
- 19. <u>18 #74 D-10 allowing either 3/8" HMA-A or ½" RHMA-G in Lifts 0.10' in non- exclusionary locations</u> (10-1E0004 and 10-1E4104). They should be using 1/2" RHMA –G (Comment from 02-23-2016)
  - 20. 19 #88 Heating upper plate in AASHTO T 312
- 21. **20 #52 Should the aggregate crush count requirement be revised in light of the HWT** requirements?
- 22. <u>21 #60 Define the parameters for Minor HMA (less than 1000 tons, 500 tons etc.) (5/20/2014</u> Comment, reinstated 8/25/2015)
  - 23. 22 #70 CT prioritization of failed JMF verifications (Comment from 12-02-2015)
  - 24. 23 #77 ±5 percent RAP tolerance when using less than 15% RAP
  - 25. 24 #31 HWT Variability (September 25, 2014) "Small Group" item (added 12/13/2017)
  - 25. 1. ISSUE: Concerns with high variability in HWT testing

09/25/2104

25. 2. PROPOSER: IN

25. 5. 1.

- 25. 3. RESOULTION:
- 25. 4. DATE:
- 25. 5. Comments:

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25.	5.	2.	10/21/2014
25.	5.	3.	11/14/2014
25.	5.	4.	12/17/2014
25.	5.	5.	01/23/2015
25.	5.	6.	02/19/2015
25.	5.	7.	03/18/2015
25.	5.	8.	04/09/2015
25.	5.	9.	05/21/2015
25.	5.	10.	06/25/2015
25.	5.	11.	07/22/2015
25.	5.	12.	09/30/2015
25.	5.	13.	10/23/2015
25.	5.	14.	12/02/2015
25.	5.	15.	02/23/2016
25.	5.	16.	03/17/2016
25.	5.	17.	09/20/2016
25.	5.	18.	01/11/2017
25.	5.	19.	02/15/2017

- 25. 5. 20. 03/08/2017
- 25. 5. 21. 12/13/2017
- 25. 5. 22. **01/24/2018** 
  - 25. 5. 22. 1. IN: Would be willing to accept 7.0% +/-0.5% with a change in the number of cycles to failure
  - 25. 5. 22. 2. CT: CT is not willing to change from the position provided to industry.
  - 25. 5. 22. 3. IN: need to evaluate and develop appropriate limits for asphalt rubber mixes. This has not been done to date.
  - 25. 5. 22. 4. CT: Agree with industry that a comprehensive evaluation of asphalt rubber needs to be done. Larger effort that needs research resources
  - 25. 5. 22. 5. IN: Can CT query managers on how we can address the testing issue with asphalt rubber mixes until a comprehensive evaluation is complete?.
  - 25. 5. 22. 6. CT: CT will discuss internally.
- 26. Proposed Bin List Items That Were Resolved
- 27. <u>FOLLOW-UP: Sampling Location: Contractor requests the option to require Caltrans to take</u> acceptance samples behind the paver when the contractor samples behind the paver.
  - 28.